

## FLOW CELL HUMIDITY SENSOR SYSTEM

### ABSTRACT OF THE DISCLOSURE

A system for monitoring water concentration in gaseous sample is disclosed. It is readily applicable in the synthesis of biopolymer arrays/microarrays involving the use of water-sensitive reagents. A flow cell is provided in which a capacitance sensor is placed separate from a production or synthesis environment. Sample and dry gas may be provided to the flow cell via conduits and valves or a manifold system. Dry gas, such as N<sub>2</sub>, is used to dry the sensor or simply to maintain it in a dried condition. The same gas may be used to drive an optional venturi pump to draw sample for measurement into the cell from the synthesis environment.